<!-- /\* Style Definitions \*/ p.MsoNormal, li.MsoNormal, div.MsoNormal {mso-style-parent:""; margin:0in; margin-bottom:.0001pt; mso-pagination:widow-orphan; font-size:12.0pt; font-family:"Times New Roman"; mso-fareast-font-family:"Times New Roman"; mso-fareast-font-family:"Times New Roman"; mso-margin-hottom-altrauto:

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| Defense  |
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| Appropriation Bill:  |
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| Defense  |
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|  |
| Project Name:  |
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| Gentle Medical Tapes and Dressings for Fragile, Damaged or Sensitive Skin |  |  |  |  |  |
|---|--|--|--|--|--|
| Amount:   |  |  |  |  |  |
|   |  |  |  |  |  |
| \$1.5 million   |  |  |  |  |  |
| Recipient Name:   |  |  |  |  |  |
|   |  |  |  |  |  |
| 3M  |  |  |  |  |  |
| Recipient Address:  |  |  |  |  |  |
|   |  |  |  |  |  |
| 3M Center, Building 0224-2-S-25, Saint Paul, MN, 55144                    |  |  |  |  |  |

| Expl  | anation of Reques    | t:                   |                    |                     |                    |       |
|-------|----------------------|----------------------|--------------------|---------------------|--------------------|-------|
| The   | project will benefit | both the military an | d the civilian por | oulation helping to | reduce infections, | which |
|       |                      |                      |                    |                     |                    |       |
| Appr  | opriation Bill:      |                      |                    |                     |                    |       |
| Defe  | nse                  |                      |                    |                     |                    |       |
| Proje | ect Name:            |                      |                    |                     |                    |       |

, Sioux Falls, SD, 57104

\$1.5 million

**Recipient Name:** 

Aerostar, Inc.

**Recipient Address:** 

1814 F Avenue

**Explanation of Request:** 

| FY 2010 Defense   |                   |
|---|-------------------|
|   |                   |
| This funding will continue the HiSentinel program under development by the Army | Space & Missile D |
|   |                   |
|   |                   |
|   |                   |
| Appropriation Bill:   |                   |
| Defense   |                   |
| Project Name:   |                   |
| i iojoot Hame.  |                   |
| MEMS Microdetonator Packaging Technology for Advanced DOD Weapons               |                   |

| Amount:               |                                  |
|-----------------------|----------------------------------|
| \$1 million           |                                  |
| Recipient Name:       |                                  |
| Black Hills           | Nanosystems                      |
| Recipient Address:    |                                  |
| 1350 Concourse Drive  | , Suite A, Rapid City, SD, 57703 |
| Explanation of Reques | st:                              |

| MEMS Safe & Arm (S&A) devices ensure personnel safety by reducing the risk of | unintended detona |
|---|-------------------|
|   |                   |
|   |                   |
|   |                   |
| Appropriation Bill:   |                   |
| Defense   |                   |
| Project Name:   |                   |
|   |                   |
| Exploding Foil Initiators with Nanomaterial-Based Circuits                    |                   |

| Amount:               |                                  |
|-----------------------|----------------------------------|
| \$1 million           |                                  |
| Recipient Name:       |                                  |
| Black Hills           | Nanosystems                      |
| Recipient Address:    |                                  |
| 1350 Concourse Drive  | , Suite A, Rapid City, SD, 57703 |
| Explanation of Reques | st:                              |

| Exploding Foil Initiators ("EFI") can save lives by reducing unintended detonation, while their high relia |
|--|
| The requested funds will enable further ramp-up of the technology into manufacturing, providing jobs       |
|  |
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|  |
| Appropriation Bill:  |
|  |
| Defense  |
| Project Name:  |
|  |
|  |
| B-1 AESA Radar Operational Utility Evaluation  |

| Amount:                                    |               |       |  |
|--|---------------|-------|--|
| \$2 million                                |               |       |  |
| Recipient Name:                            |               |       |  |
| Boeing                                     |               |       |  |
| Recipient Address:                         |               |       |  |
| The Boeing Company, 1200 Wilson Boulevard, | Arlington, VA | 22209 |  |
| Explanation of Request:                    |               |       |  |

| FY 2010 Defense   |                       |
|---|-----------------------|
|   |                       |
| This request supports an operational evaluation of an advanced targeting radar, | the Active Electronic |
|   |                       |
|   |                       |
|   |                       |
|   |                       |
| Appropriation Bill:   |                       |
|   |                       |
| Defense   |                       |
| Project Name:   |                       |
|   |                       |
|   |                       |
| Next Generation Lightweight Drive Systems for Army Weapon Systems               |                       |

| Amount:                  |                   |  |
|--------------------------|-------------------|--|
| \$1 million              |                   |  |
| Recipient Name:          |                   |  |
|                          |                   |  |
| Dakota Power             |                   |  |
| Recipient Address:       |                   |  |
| 3111 Lien Street , Rapid | l City, SD, 57702 |  |
| Explanation of Request:  |                   |  |

| FY 20 | 110 Defense   |                    |
|-------|---|--------------------|
| This  | request will help advance a new technology to more efficiently power military | and civilian vehic |
|       |   |                    |
|       |   |                    |

## **Appropriation Bill:**

Defense

**Project Name:** 

Optimization, and Transfer of a Reliable Testing Technology for Materials Designed to Protect War-fig

| Amount:                       |                |           |  |  |
|-------------------------------|----------------|-----------|--|--|
|                               |                |           |  |  |
|                               |                |           |  |  |
| \$650,000                     |                |           |  |  |
| Recipient Name:               |                |           |  |  |
|                               |                |           |  |  |
|                               |                |           |  |  |
| EMCC                          |                |           |  |  |
|                               |                |           |  |  |
| Recipient Address:            |                |           |  |  |
|                               |                |           |  |  |
|                               |                |           |  |  |
| 525 University Loop, Suite 11 | 3, Rapid City, | SD, 57701 |  |  |
|                               |                |           |  |  |
| Explanation of Request:       |                |           |  |  |
|                               |                |           |  |  |
|                               |                |           |  |  |

| In addition to addressing | this consequential war-fighte | r protective application | on within the Department o |
|---------------------------|-------------------------------|--------------------------|----------------------------|
| EMCC is located on the    | campus of the South Dakota    | School of Mines &        | Technology and has a form  |
|                           |                               |                          |                            |
|                           |                               |                          |                            |
|                           |                               |                          |                            |
|                           |                               |                          |                            |
| Appropriation Bill:       |                               |                          |                            |
|                           |                               |                          |                            |
| Defense                   |                               |                          |                            |
| Project Name:             |                               |                          |                            |
| Project Name.             |                               |                          |                            |
|                           |                               |                          |                            |
| Airborne Commercial If    | SAR Mapping Production        |                          |                            |

| Amount:                                |
|--|
| \$1 million                            |
| Recipient Name:                        |
| Fugro Earth Data, Inc                  |
| Recipient Address:                     |
| 3600 Jet Drive , Rapid City, SD, 57703 |
| Explanation of Request:                |
|  |

| The U.S. Military Combatant Commanders and the intelligence community have unfunded, | high-priori |
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|  |             |
| Appropriation Bill:  |             |
|  |             |
| Defense  |             |
| Project Name:  |             |
| IV/IJNAO for JULI 70A Labora   |             |
| IVHMS for UH-72A Lakota  |             |

| Amount:                              |
|--------------------------------------|
|                                      |
|                                      |
| \$1 million                          |
|                                      |
| Recipient Name:                      |
|                                      |
|                                      |
| Goodrich Corporation                 |
|                                      |
| Recipient Address:                   |
|                                      |
| 100 Pantan Raad Vargannas VT 05401   |
| 100 Panton Road, Vergennes, VT 05491 |
| Explanation of Request:              |
| •                                    |
|                                      |

| The Lakota fleet performs | critical multi-role missions including; medical evacuation, transport, drug in |
|---------------------------|--|
| Raven Industries in Sioux | Falls is a key sub-contractor for the Goodrich Corporation, which is the main  |
|                           |  |
|                           |  |
|                           |  |
|                           |  |
| Appropriation Bill:       |  |
|                           |  |
| Defense                   |  |
|                           |  |
| Project Name:             |  |
|                           |  |
| Preventative Maintenance  | e using Kinetic Particle Deposition Technology                                 |
|                           |  |

| Amount:  |
|--|
| \$1 million  |
| Recipient Name:  |
| H.F. Webster, Inc.                                     |
| Recipient Address:                                     |
| 4020 Jackson Boulevard, Suite 4, Rapid City, SD, 57702 |
| Explanation of Request:                                |

| FY 20         | 10 Defense  |                         |
|---------------|---|-------------------------|
|               |   |                         |
|               |   |                         |
| This          | funding would develop and qualify specific repair procedures for military | equipment using kinetic |
|               |   |                         |
|               |   |                         |
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|               |   |                         |
| Annr          | opriation Bill:   |                         |
| Λ <b>ρ</b> ρι |   |                         |
|               |   |                         |
|               |   |                         |
| Defer         | nse   |                         |
|               |   |                         |
| Proje         | ct Name:  |                         |

Aging and Battle Damaged Weapon Systems Repair

| Amount:  |
|--|
|  |
|  |
| \$1.5 million  |
|  |
| Recipient Name:  |
|  |
|  |
| H.F. Webster, Inc.                                     |
|  |
| Recipient Address:                                     |
|  |
|  |
|  |
| 4020 Jackson Boulevard, Suite 4, Rapid City, SD, 57702 |
|  |
| Explanation of Request:                                |
|  |
|  |

| Repair requirements for Army and Marine ground vehicles returning from Iraq and Afghanistan are ex<br>The purpose of this funding request is to identify opportunities for cost savings associated with applying |
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| Appropriation Bill:  |
|  |
| Defense  |
| Project Name:  |
| roject Name.   |
|  |
| Stabilized Hemoglobin Wound Healing Development Project  |
| Amount:  |

| FY 2010 Defense   |                     |
|---|---------------------|
|   |                     |
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|   |                     |
|   |                     |
|   |                     |
| \$1.5 million   |                     |
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|   |                     |
| Recipient Name:   |                     |
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| IKOR  |                     |
|   |                     |
|   |                     |
| Recipient Address:  |                     |
|   |                     |
|   |                     |
|   |                     |
| 212 South Kline Street, 3rd Floor, Aberdeen, South Dakota, 57401                  |                     |
|   |                     |
|   |                     |
| Explanation of Request:   |                     |
|   |                     |
|   |                     |
|   |                     |
| This cutting edge project holds potential not only as a wound-healing advancement | that can benefit th |
| ggg-pj p p net em j de d mesme mesmig de dans                                     |                     |

| Appropriation Bill:   |              |
|---|--------------|
| Defense   |              |
| Project Name:   |              |
| Advanced Robot and Sensor Technology for Surveillance and Energy Efficiency | Applications |
| Amount:   |              |

| FY 2010 Defense   |                 |
|---|-----------------|
|   |                 |
|   |                 |
|   |                 |
|   |                 |
| \$1 million   |                 |
| φι million  |                 |
|   |                 |
|   |                 |
| Recipient Name:   |                 |
|   |                 |
|   |                 |
|   |                 |
|   |                 |
| Lloyd's Systems   |                 |
|   |                 |
|   |                 |
| Recipient Address:  |                 |
|   |                 |
|   |                 |
|   |                 |
|   |                 |
| 2011 West Oracle Chart Berid City CD 57700  |                 |
| 2911 West Omaha Street, Rapid City, SD, 57702   |                 |
|   |                 |
|   |                 |
| Explanation of Request:   |                 |
|   |                 |
|   |                 |
|   |                 |
|   |                 |
| The Army has identified among the top ten needs of the warfighter reducing the energy | footprint, batt |
|   |                 |

| Appropriation Bill:   |
|---|
| Defense   |
| Project Name:   |
| LITENING Generation 4 Pod Kit Upgrades for Air National Guard |
| Amount:   |

| FY 2010 Defense  |                  |
|--|------------------|
|  |                  |
|  |                  |
|  |                  |
| \$1 million  |                  |
|  |                  |
|  |                  |
| Recipient Name:  |                  |
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|  |                  |
|  |                  |
| Northrup Grumman (for South Dakota Air Guard)                                  |                  |
|  |                  |
|  |                  |
| Recipient Address:   |                  |
|  |                  |
|  |                  |
|  |                  |
|  |                  |
| 1201 West Algonquin Street, Sioux Falls, SD, 57104                             |                  |
|  |                  |
|  |                  |
| Evalenation of Deguests  |                  |
| Explanation of Request:  |                  |
|  |                  |
|  |                  |
|  |                  |
|  |                  |
| The LG4 Enhancement kit provides a new 4th Generation Forward Looking Infrared | sensor, 4th Gene |
|  |                  |

| Appropriation Bill:                                     |
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|   |
| Defense   |
|   |
| Project Name:   |
|   |
|   |
| All-Terrain Ultra Lightweight Tactical Utility Vehicles |
|   |
| Amount:   |
|   |
|   |

| \$1 million  |                      |
|--|----------------------|
| Recipient Name:  |                      |
| Polaris  |                      |
| Recipient Address:   |                      |
| 2100 Highway 55, Medina, MN, 55340   |                      |
| Explanation of Request:  |                      |
| The requested action is an efficient use of taxpayer dollars because the product | that would be procur |

| Appropriation Bill:                             |
|---|
| Defense   |
| Project Name:                                   |
| Advanced Electronics Rosebud Integration (AERI) |
| Amount:   |
| \$2.5 million                                   |

| FY 2010 Defense  |  |
|--|--|
|  |  |
| Recipient Name:  |  |
| ricolpiciti Name.  |  |
|  |  |
| Rosebud Sioux Tribe  |  |
| Recipient Address:   |  |
|  |  |
| 441 · A  |  |
| 11 Legion Avenue, Rosebud, South Dakota, 57570                         |  |
| Explanation of Request:  |  |
|  |  |
| Funding will be used to build, test, demonstrate and conduct replicate | ed field trials of electronic circuitr |
|  |  |
|  |  |

| Appropriation Bill:   |                 |
|---|-----------------|
|   |                 |
| Defense   |                 |
| Project Name:   |                 |
|   |                 |
| Life Extension of Navy Weapon System Structures Through Application of Advanced | Materials Proce |
| Amount:   |                 |
|   |                 |
| \$1 million   |                 |

| Recipient Name:  |
|--|
| South Dakota School of Mines & Technology  |
| Recipient Address:   |
| 501 East Saint Joseph Street, Rapid City, SD, 57701  |
| Explanation of Request:  |
| The School of Mines is the lead institution for one of the nation's premier NSF Industry/University Co |
| Repairing and returning our military resources to service is a huge and expensive challenge facing of  |

| Appropriation Bill:  |       |
|--|-------|
| Defense  |       |
| Project Name:  |       |
| Smart Integrated Systems (SIS): Materials, Manufacturing Methods, and Structures | (M3S) |
| Amount:  |       |
|  |       |
| \$2 million  |       |

| FY 2010 Defense   |                           |
|---|---------------------------|
|   |                           |
| Recipient Name:   |                           |
| South Dakota School of Mines & Technology                                     |                           |
| Recipient Address:  |                           |
|   |                           |
| 501 East Saint Joseph Street, Rapid City, SD, 57701                           |                           |
| Explanation of Request:   |                           |
| The format for this Department of Defence request is unique as it bundles six | towicelly veleted preject |
| The format for this Department of Defense request is unique as it bundles six | topically related project |
|   |                           |

| Appropriation Bill:                                 |
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|   |
| Defense   |
| Project Name:                                       |
|   |
|   |
| Energy Efficiency, Recovery and Generation – ENERGy |
| Amount:   |
|   |
|   |
| \$1 million   |

| Recipient Name:  |                 |
|--|-----------------|
|  |                 |
| South Dekete School of Mines & Technology  |                 |
| South Dakota School of Mines & Technology  |                 |
| Recipient Address:   |                 |
|  |                 |
| 501 East Saint Joseph Street, Rapid City, SD, 57701                              |                 |
| Explanation of Request:  |                 |
|  |                 |
| The ENERGy project focuses on the primary Air Force energy demand, which is fuel | for jet engines |
|  |                 |
|  |                 |

| Appropriation Bill:                                  |
|--|
| Defense  |
| Project Name:  |
| Multi-Utility Materials (MUM) for Army Future Combat |
| Amount:  |
| \$1.5 million  |

| Recipient Name:  |
|--|
| South Dakota School of Mines & Technology  |
| Recipient Address:   |
| 501 East Saint Joseph Street, Rapid City, SD, 57701  |
| Explanation of Request:  |
| This request supports the successful collaboration between Florida A&M, lowa State University and Stor South Dakota specifically, the technologies involved in the prototyping and manufacturing process |
|  |

| Appropriation Bill:                              |
|--|
| Defense  |
| Project Name:                                    |
| Alternative Power Technology for Missile Defense |
| Amount:  |
| \$2 million                                      |

| Recipient Name:   |                        |
|---|------------------------|
| South Dakota State University   |                        |
| Recipient Address:  |                        |
| PO Box 2201, SAD 130, Brookings, SD, 57007  |                        |
| Explanation of Request:   |                        |
| Critical need exists for alternative power generation systems that are efficient, | environmentally clean, |
|   |                        |

**Recipient Name:** 

| FY 2010 Defense  |            |
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|  |            |
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|  |            |
|  |            |
|  |            |
| South Dakota State University  |            |
|  |            |
|  |            |
| Recipient Address:   |            |
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|  |            |
|  |            |
|  |            |
| PO Box 2201, SAD 130, Brookings, SD, 57007   |            |
|  |            |
| Explanation of Paguast:  |            |
| Explanation of Request:  |            |
|  |            |
|  |            |
|  |            |
| The US Army at Army Research Lab (ARL) is currently developing concepts for the next | generation |
|  |            |
|  |            |
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| Appropriation Bill:  |
|--|
| Defense  |
| Project Name:  |
|  |
| Accelerated Materials Development and Characterization for Army Cannon Systems |
| Amount:  |
|  |
| \$1 million  |
| Recipient Name:  |

| FY 2010 Defense   |                           |
|---|---------------------------|
|   | <del></del>               |
|   |                           |
|   |                           |
|   |                           |
| South Dakota State University   |                           |
|   |                           |
| Recipient Address:  |                           |
| <b>,</b>  |                           |
|   |                           |
|   |                           |
|   |                           |
| PO Box 2201, SAD 130, Brookings, SD, 57007                                  |                           |
|   |                           |
| Explanation of Request:   |                           |
|   |                           |
|   |                           |
|   |                           |
|   |                           |
| In addition to serving the Army's goal of evaluating the next generation of | cannon systems, the added |
|   |                           |
|   |                           |
|   |                           |
|   |                           |
|   |                           |

| Appropriation Bill:                  |
|--------------------------------------|
|                                      |
| Defense                              |
| Project Name:                        |
|                                      |
| Predicting Bio-Agent Threat Profiles |
| Amount:                              |
|                                      |
| \$1 million                          |
| Recipient Name:                      |

| FY 2010 Defense                            |
|--|
|  |
| South Dakota State University              |
| Recipient Address:                         |
| PO Box 2201, SAD 130, Brookings, SD, 57007 |
| Explanation of Request:                    |
|  |

This program develops a bio-agent prediction capability to forecast terrorist threats. The release of de

| Appropriation Bill: |
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|                     |
| Defense             |
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|                     |
| Project Name:       |
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|                     |
|                     |
| Underground Mapping |
|                     |
|                     |
| Amount:             |
| Amount.             |
|                     |
|                     |
|                     |
|                     |
| \$1 million         |
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| Destricted Name     |
| Recipient Name:     |
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|                     |
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| South Dakota State University   |
|---|
| Recipient Address:  |
| PO Box 2201, SAD 130, Brookings, SD, 57007  |
| Explanation of Request:   |
|   |
| The Deep Underground Science & Engineering Laboratory (DUSEL) comprises a complex of shafts |
|   |
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|   |
|   |
| Appropriation Bill:   |

| Defense  |
|--|
|  |
| Project Name:  |
|  |
| Center for Engineered Biomedical Devices at the University of South Dakota |
| Amount:  |
|  |
| \$395,000  |
|  |
| Recipient Name:  |
|  |
| University of South Dakota   |

| FY 2010 Defense  |                    |
|--|--------------------|
|  |                    |
| Recipient Address:   |                    |
| 501 East Saint Joseph Street, Rapid City, SD, 57701                            |                    |
| Explanation of Request:  |                    |
| The Center for Engineered Biomedical Devices at The University of South Dakota | (CEBD) is a valuab |
|  |                    |
| Appropriation Pills  |                    |
| Appropriation Bill:  |                    |

| FY 2010 Defense   |
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|   |
| Defense   |
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|   |
| Project Name  |
| Project Name:   |
|   |
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|   |
|   |
| USD Consortium on Traumatic Brain Injury and Post-Traumatic Stress Disorder |
|   |
|   |
|   |
| Amount:   |
|   |
|   |
|   |
|   |
| \$1 million   |
|   |
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|   |
| Recipient Name:   |
|   |
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|   |
|   |

University

of South Dakota

| Recipient Address:                                      |  |
|---|--|
| 414 East Clark Street , Vermillion, SD, 57069           |  |
| Explanation of Request:                                 |  |
|   |  |
| The University of South Dakota Consortium on Traumation | Brain Injury and Post-Traumatic Stress Disor |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |